ASOS PROGRAM MANAGEMENT COMMITTEE

RECORD APMC 02-2 (FINAL)

July 16, 2002

1. CONVENED - 9:00 AM

A meeting of the ASOS Program Management Committee (APMC) was convened by Chair Douglas Hess on July 16, 2002. The meeting was in Room 12246, Silver Spring Metro Center Building 2 (SSMC-2), National Weather Service Headquarters, Silver Spring, MD.

Members participating:

Chair	-	Douglas Hess
DOC	-	Rainer Dombrowsky
	-	Paul Harris (for Frank Kelly)
DOD	-	Lt. Col. Terry Clark(For Col. Nathan Feldman, USAF)
	-	CDR. Richard Thayer (for Capt. Eric McBee, USN)
DOT	-	Ray Weimer, Jr. (for Deborah Johnson)
	-	David Whatley
ASOS PI	-	Richard Ahlberg, Jr.
Ex. Sec.	-	Lewis Kozlosky

Advisors and/or guests included: John Bradley, Kevin Conaty, Joe Devost, Rob Ericson, Joe Facundo, Seth Gutman, Steve Jenne, Anthony Leonardo, David Mannarano, Roger Pierce, Steve Pritchett, Tim Ross, Susan Sahm, and Brathley Smith from DOC; Paul Armbruster, Bob Beatty, Ralph Buck, and Jerry Kranz, from DOT; and Ed Heusinger, Jr. from DOD.

2. OPENING REMARKS AND PREVIOUS MINUTES

Mr. Hess recognized the members and alternates in attendance as indicated above.

The February 12, 2002, Corrected Minutes were approved without comment.

3. ASOS CCB REPORT

The ASOS Configuration Control Board (ACCB) Request for Change (RC) Status Report was provided to members in their folders. Mr. Ahlberg indicated there were seven RC decisions pending his signature as ACCB Chair. No further discussion was raised concerning the ACCB Report.

4. NWS PROGRAM STATUS BRIEFING

All Weather Precipitation Accumulation Gauge (AWPAG): Mr. Whatley asked if the heated plate technology was being considered as an alternative to the AWPAG. He stated that the heated plate technology may save money and could be more reliable. Mr. Ahlberg replied that there is a briefing planned for August 12-13 to discuss the potential benefits of the heated plate alternative. Mr. Ahlberg stated power consumption and acquisition issues need to be considered.

The FAA has indicated that they want the AWPAG to be deployed before the snow depth sensor deployment.

ACU Processor Upgrade: The following issues were highlighted:

Mr. Ahlberg stated the following problems have been, or are being corrected: Sky Condition and DCP Corruption; Lock-up & Excessive Warm Starts; Anomalous Wind Speed; and ADAS Communications Problems.

Mr. Ahlberg added that Version 2.6A-3 would be deployed to 17 Service-level 0 site, to be followed by Service level D sites for Operational Acceptance Testing. More complex systems are showing more problems.

Mr. Hess asked why there are software problems with the new processor. Mr. Ahlberg replied that the new processor requires more complex software code. Mr. Harris stated new deployments could begin next month if system testing is successful.

CDR. Thayer asked if Navy acquisition of the new processor could be added to the contract. Mr. Ahlberg replied that the contract should be able to accommodate Navy participation.

Action:
Ahlberg - Provide information on the Processor Upgrade contract so the Navy can determine a participation strategy.

Mr. Hess asked if the new processor software problems are being evaluated. Mr. Harris replied that there will be a meeting with Prism to determine if software should be redesigned to eliminate existing problems and to eliminate problems as they are found.

Dew Point Sensor Replacement:

405 units have been awarded; 314 for NWS, and 91 for FAA.

Mr. Facundo asked what the sparing strategy will be. Mr. Ahlberg replied that 22 whole-unit spares will be available.

Ice Free Wind Sensor:

22 limited-production have been delivered. OAT is pending the development of a stable software load. Heater failures have been corrected with diagnostic software and assembly procedures have been improved.

Enhanced Precipitation Identifier:

The COTS evaluation may be abbreviated. Three to five vendors may compete.

Ceilometer Replacement:

Mr. Facundo pointed out that 75,000ft. Ceilometers are available, which could improve the Satellite Cloud Product. Mr. Dombrowsky added that the climate community would like ceilometers to have 40,000ft. capability or greater. Mr. Ahlberg said he has not seen a documented NWS requirement for such a system, but would look into the issue.

Action:
Ahlberg: Request verification of Operational Requirements for higher altitude-capable ceilometers.

Mr. Ahlberg concluded his presentation with a summary of deployment schedules for each PI initiative.

5. USE OF ASOS DATA FOR GPS-MET WATER VAPOR RETRIEVALS - Evaluating a New Composite Observing System Strategy for NOAA

Mr. Seth Gutman and Ms. Susan Sahm of the NOAA Forecast Systems Laboratory provided an informational briefing on this latest technology.

This concept has been shown to provide near real time atmospheric water vapor measurements with high reliability and accuracy.

This technology uses high-end ($5-10K) GPS receivers, which are now commonly available. Proximity to surface meteorological systems, including ASOS, may be designated as "backbone" sites. GPS-Meteorological data is being sent through the NWS Telecommunication Gateway, and assimilation into NCEP operational models is expected shortly.

Local government, university, and private sector GPS data are available in near real time with low expense, therefore, a significant increase of sites may be feasible and cost effective.

Five-minute ASOS pressure data is needed to facilitate continuing research. Mr. Hess said a request for the 5-minute data should be formally communicated to NWS Headquarters. Mr. Facundo said that could be accommodated through his organization. Mr. Gutman said he would send a letter to Mr. Hess requesting the 5-minute data.

6. ASOS INTERNET CONNECTIVITY

Mr. Leonardo (for Al Wissman) summarized that the approved preliminary RC for development of the Internet interface authorized testing at five sites. Factory acceptance testing resulted in system lock-up and time drift. A five-site demonstration is scheduled for late August, 2002.

A revised RC to authorize operational testing at 50 sites will be submitted. A full implementation RC is expected to be ready by the next APMC meeting.

Mr. Leonardo stated the support of the APMC will be needed for the implementation of this concept. Mr. Hess asked how that would be formally accomplished. Mr. Kozlosky summarized that as the RC is being developed, the submitter needs to coordinate with the agencies to ensure agency commitments are obtained and reflected therein.

Mr. Dombrowsky indicated that funding has been requested for the Internet interface in the FY04 COOP budget initiative. Mr. Whatley stated the FAA has not participated because FAA operational requirements are being met. Mr. Hess added that FAA would require demonstrated benefits to justify funding.

7. ASOS OPERATIONS

Mr. Leonardo presented the status of ASOS monthly operations and maintenance. System Availability, Mean Time Between Failure, Mean Time Sensor Recovery (MTSR), Maintenance Restoration statistics, Trouble Ticket data, and Percentage of Missed Observations were reported. Mean time between failure data are about the same as the last reporting period, temperature-dewpoint sensor problems are being addressed, and NWS Central Region data was affected by flooding last year.

Mr. Facundo said PPI data was to be included in the briefing.

Action:
Wissman - Provide statistics of PPI sensors for comparison to legacy sensors.

8. ASOS SOFTWARE WORKING GROUP (ASWG) ACTIVITIES

Mr. Dombrowsky presented the ASWG report, and summarized that the ASWG was chartered to ensure better ASOS software management.

S Versions 2.78 (2.8 on old processor) and 2.79 (2.8 on new processor) are being developed.

S Version 3.0 content has been determined, and will be documented by an RC to be submitted in late summer.

S Version 3.2 content has been proposed, and the RC will be submitted when Version 3.0 is being developed.

The Volcanic Eruption Reporting RC, is undergoing interagency research.

CDR. Thayer said some Navy sensors are not supported by planned software builds, and some Navy-specific sensors may have to be replaced.

Mr. Ahlberg pointed out that it may be possible to add Navy-specific sensors to the baseline via the RC process.

9. ACTION ITEMS

APMC 02-1.1: Rainer Dombrowsky and JoAnn Ford - Produce and distribute a User Notification message to accommodate the three-second versus five-second wind gust averaging resulting from the deployment of the Ice Free Wind Sensor. STATUS: NEW 2/12/02; Issue still pending 7/16/02

APMC 02-2.1: Ahlberg - Provide information on the Processor Upgrade contract so the Navy can determine a participation strategy. STATUS: NEW 7/16/02

APMC 02-2.2: Ahlberg - Request verification of Operational Requirements for higher altitude-capable ceilometers. STATUS: NEW 7/16/02

APMC 02-2.3: Wissman - Provide statistics of PPI sensors for comparison to legacy sensors. STATUS: NEW 7/16/02

10. OTHER BUSINESS

Mr. Kozlosky summarized that the ACCB and ASWG Charters were ratified. He added that the ACCB now formally operates in accordance with the reorganized NWS, with the Navy as a formal member; and the ASWG was formally established.

11. NEXT MEETING

The proposed date for the next APMC is Tuesday, November 14, 2002. Time and location: 9:00 to 1:00, Room 4246 in Building SSMC2, National Weather Service Headquarters, Silver Spring, MD.

12. EXECUTIVE SESSION

The Chair offered members the opportunity to convene an Executive Session. The committee members unanimously declined.

13. ADJOURN - The APMC adjourned at 12:10 p.m.